AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (CURRENTLY AMENDED) A one-way, bi-directional clutch, comprising:

an outer casing having a first end;

an input shaft that is rotationally supported by the first end of the outer casing, the input shaft having a flange with an ~~integral~~ input shaft release cam means;

an output shaft that is rotationally supported by the second end of the outer casing, the output shaft having a flange with an ~~integral~~ output shaft locking cam means;

a brake assembly comprising a brake assembly release cam means that is ~~complimentary~~complementary to the input shaft release cam means ~~of the input shaft~~, a brake assembly locking cam means that is ~~complimentary~~complementary to the output shaft locking cam means ~~of the output shaft~~, a biasing member, and at least one brake pad;

wherein the brake assembly is movable between a brake position where the one or more brake pads are in contact with the first end of the outer casing and a release position where the one or more brake pads are not in contact with the first end of the outer casing;

wherein the ~~complimentary~~complementary release cam means of the input shaft and brake assembly are operable to move the brake assembly to the release position when sufficient torque is applied to the input shaft; and

wherein the complementary locking cam means of the output shaft and brake assembly are ~~is~~ operable to move the brake assembly to the brake position when sufficient torque is applied to the output shaft, and

wherein the biasing member biases the brake assembly release cam means from the brake assembly locking cam means.

2. (ORIGINAL) The one-way bi-directional clutch of claim 1, wherein torque applied to the output shaft is not translated to the input shaft when the brake assembly is in the brake position.

3. (ORIGINAL) The one-way bi-directional clutch of claim 2, wherein torque applied to the input shaft is translated to the output shaft when the brake assembly is in the release position.

4. (CURRENTLY AMENDED) The one-way bi-directional clutch of claim 3, wherein the locking cam means of the output shaft ~~include~~ includes at least one locking cam divot located on a flange of the output shaft;

wherein the locking cam means of the brake assembly includes at least one locking cam divot located on a floating locking plate; and

wherein a bearing is disposed between each of the locking cam divots of the output shaft and the corresponding locking cam divots of the floating locking plate.

5. (CURRENTLY AMENDED) The one-way bi-directional clutch of claim 4, wherein the floating locking plate includes three (3) locking cam divots and the flange of the output shaft includes three (3) locking cam divots, wherein the locking cam divots of the output shaft are ~~complimentary~~complementary to the locking cam divots of the floating locking plate.

6. (ORIGINAL) The one-way bi-directional clutch of claim 5, wherein at least one of the locking cam divots of the output shaft includes two shallow portions surrounding a deep portion.

7. (ORIGINAL) The one-way bi-directional clutch of claim 5, wherein at least one of the locking cam divots of the floating locking plate includes two shallow portions surrounding a deep portion.

8. (CURRENTLY AMENDED) The one-way bi-directional clutch of claim 3, wherein the ~~complimentary~~complementary release cam means of the input shaft ~~include~~ includes at least one ~~locking~~ release cam divot located on a flange of the input shaft,

wherein the release cam means of the brake assembly includes at least one release cam divot located on a locking disc; and

wherein a bearing is disposed between each of the release cam divots of the input shaft and the corresponding release cam divots of the locking disc.

9. (CURRENTLY AMENDED) The one-way bi-directional clutch of claim 8, wherein the locking disc includes three (3) release cam divots and the flange of the input shaft includes three (3) release cam divots, wherein the release cam divots of the input shaft are ~~complimentary~~complementary to the release cam divots of the locking disc.

10. (ORIGINAL) The one-way bi-directional clutch of claim 8, wherein at least one of the release cam divots of the input shaft includes two shallow portions surrounding a deep portion.

11. (ORIGINAL) The one-way bi-directional clutch of claim 8, wherein at least one of the release cam divots of the locking disc includes two shallow portions surrounding a deep portion.

12. (ORIGINAL) The one-way bi-directional clutch of claim 8, wherein the input shaft further includes a track having a pre-determined depth that connects each of release cam divots thereon, wherein each the bearings roll onto the track when a pre-determined amount of torque is applied to the input shaft.

13. (ORIGINAL) The one-way bi-directional clutch of claim 8, wherein the locking disc further includes a track having a pre-determined depth that connects each of release cam divots thereon, wherein the bearings roll onto the track when a pre-determined amount of maximum torque is applied to the input shaft.

14. (CURRENTLY AMENDED) The one-way bi-directional clutch of claim 4, wherein the brake assembly further includes ~~a first and~~ a second biasing member, the ~~first and~~ second biasing ~~members~~ member being designed ~~such that~~ to bias the brake assembly ~~is~~ in the brake position when torque is not being applied to the input and output shafts.

15. (CURRENTLY AMENDED) The one-way bi-directional clutch of claim 1, wherein the ~~complimentary~~complementary locking cam means of the output shaft and the brake assembly define a slip point; and

wherein the brake pad of the brake assembly slips along the first end of the outer casing when a pre-determined amount of torque is placed on the output shaft.

16. (ORIGINAL) The one-way bi-directional clutch of claim 1, wherein a material is applied to the first end of the outer casing to alter the coefficient of friction between the one or more brake pads and the first end of the outer casing.

17. (NEW) A one-way, bi-directional clutch, comprising:

an outer casing having a first end;

an input shaft that is rotationally supported by the first end of the outer casing, the input shaft having a flange with an input shaft release cam means;

an output shaft that is rotationally supported by the second end of the outer casing, the output shaft having a flange with an output shaft locking cam means; and

a brake assembly comprising a brake assembly release cam means that is complementary to the input shaft release cam means, a brake assembly locking cam means that is complementary to the output shaft locking cam means, a biasing member, and at least one brake pad;

wherein the brake assembly is movable between a brake position where the one or more brake pads are in contact with the first end of the outer casing and a release position where the one or more brake pads are not in contact with the first end of the outer casing,

wherein the complementary release cam means of the input shaft and brake assembly are operable to move the brake assembly to the release position when sufficient torque is applied to the input shaft,

wherein the complementary locking cam means of the output shaft and brake assembly are operable to move the brake assembly to the brake position when sufficient torque is applied to the output shaft,

wherein torque applied to the output shaft is not translated to the input shaft when the brake assembly is in the brake position,

wherein torque applied to the input shaft is translated to the output shaft when the brake assembly is in the release position,

wherein the release cam means of the input shaft includes at least one release cam divot located on a flange of the input shaft,

wherein the release cam means of the brake assembly includes at least one release cam divot located on a locking disc, and

wherein a bearing is disposed between each of the release cam divots of the input shaft and the corresponding release cam divots of the locking disc,

wherein one of the input shaft or the locking disc further includes a track having a pre-determined depth that connects each of the release cam divots thereon, wherein each the bearings roll onto the track when a pre-determined amount of torque is applied to the input shaft.